

### **DETAILED ACTION**

1. The responses filed on March 29, 2009, July 14, 2009 and October 28, 2009 have been received and entered as appropriate.

### ***Election/Restrictions***

2. Newly submitted claim 13 is directed to a species that is independent or distinct from the invention originally claimed for the following reasons:

Species A - the fastening means of Figures 13-15;

Species B - the fastening means of Figures 4-7.

Species A is directed to a cutting arrangement having a fastening means with the special technical feature of a fastening pin having two threaded portions of different pitches which is not required for Species B.

Species B is directed to a cutting arrangement having a fastening means with the special technical feature of two joining plates with holes for securing pins, wherein the plates are inserted in slits of each shell which is not required for Species A.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 13 has been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Drawings***

3. The drawings were received on March 29, 2009. These drawings are acceptable.

***Claim Objections***

4. Claims 1, 4, 5, 7 11 and 12 are objected to because of the following informalities:

In the subject claims, the characters provided in the parentheses must only correspond to those components of the claimed invention. Thus, because the claims are directed only to the embodiment of Figures 13-15, if applicant continues to provide such characters, only characters that pertain to the claimed embodiment must be the ones that are provided; for example, in claim 1, line 7, “(16; 16a; 16d)” should read –(16d)--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112, 1<sup>st</sup> paragraph***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original disclosure does not provide support for a shell having receiving means, wherein the receiving means comprises two threaded portions as now set forth in claim 11. Rather, support is provided for a shell 37d having receiving means 72 having a first threaded portion 73, and the roll core 17d having receiving means 69, 70 having a second threaded portion 74, wherein insert 70 is disclosed as being permanently fixed in hole 69.

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> paragraph***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 4, 5, 7, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 8, the recitation "mounted a brush-roll axis" is vague and indefinite as to what is being set forth, particularly as to how the brush roll is mounted; in line 24, "the shell" is vague as to which one; in line 25, the recitation "fastening pin" is vague as to whether it refers to that set forth in the previous paragraph or to another such pin.

In claim 11, line 12, the recitation "receiving means as through holes" is vague and indefinite as to what is being set forth; in line 13, the recitation "for associating with" is vague and indefinite as to what structure is being set forth as to the relationship with the fastening pin, and it seems that it should be changed to --threaded with-- or --threadedly connected with-- or the like.

In claim 12, line 3, the recitation "ring grooves" is vague as to whether it refers to those set forth in line 2 or to other such ring grooves.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Publication 22 25 152 (hereafter GP '152) in view of Clark, pn 3,942,210 and/or Cherry, pn 2,360,826 and/or Parr, pn 3,405,751 and/or Heine, pn 4,661,031.

Regarding claims 1 and 11, GP '152 discloses a device with almost every structural limitation of the claimed invention including:

a blade shaft (e.g., 1) which has at least one circular blade (e.g., 7), a brush roll (e.g., 9), the brush roll possessing shells (e.g., see Fig. 7) disposed on a roll core (e.g.,

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2, 10) and having bristles (e.g., 91, 92), torque-transmitting means and fastening means, but lacks:

[from claim 1] wherein fastening pin comprises two threaded portions of different pitches; and

[from claim 11] fastening means for fixing the basic structure to the roll core, wherein the fastening means is a fastening pin comprising two threaded portions of different pitches; and

receiving means as through holes comprising two threaded portions of different pitches for associating with the fastening pin.

However, the Examiner takes Official notice that such fastening means configurations are old and well known in the art and provide various well known benefits including adjustment benefits. Clark discloses examples of such fastening means configuration. Further examples are disclosed by Cherry, Parr and/or Heine. Therefore, it would have been obvious to one having ordinary skill in the art to provide such a fastening means configuration such as those taught by Clark, Cherry, Parr and/or Heine on the device of GP '152 to gain the well known benefits including those described above.

Regarding claim 7, GP '152 discloses a device with every structural limitation of the claimed invention including first and second fastening means.

In the alternative, if it is argued that there is no disclosure of such fastening means, the Examiner takes Official notice that such fastening means are old and well known in the art and provide various well known benefits including further stabilizing

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assembled components. Therefore, it would have been obvious to one having ordinary skill in the art to provide such first and second fastening means as additional fastening means on the device of GP '152 to gain the well known benefits including that described above.

11. Claims 4, 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Publication 22 25 152 (hereafter GP '152) in view of Clark, pn 3,942,210 and/or Cherry, pn 2,360,826 and/or Parr, pn 3,405,751 and/or Heine, pn 4,661,031 and further in view of Sauer, pn 3,285,642.

The combination teaches a device with almost every structural limitation of the claimed invention but lacks annular ribs and corresponding ring grooves. However, such structure is old and well known in the art and provides known benefits including facilitating non-rotationally connecting a shell to a core. Sauer discloses at least one of many known examples. Therefore, it would have been obvious to one having ordinary skill in the art to provide such rib and ring groove structure on the device of GP '152 to gain the well known benefits including that described above.

### ***Response to Arguments***

12. Applicant's arguments filed March 29, 2009 have been fully considered but they are not persuasive.

In the paragraph bridging pages 21-22, applicant argues that Clark does not disclose fastening pin with threaded portions of different pitches. However, the Examiner respectfully maintains the position taken in the preceding Office action that

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such fastener structure/configurations are old and well known in the art and provide various known benefits as described. In an effort to further support the Examiner's taking of Official notice, additional evidence has been provided in the form of additional patents. The Examiner respectfully maintains that such fastener structure is old and well known in the art and to provide such a fastener structure would have been an obvious modification to one having ordinary skill in the art for at least the reasons described in the prior art rejection.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/  
Primary Examiner, Art Unit 3724**

cfd  
January 14, 2010